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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/027,846	12/19/2001	Shivalik Bakshi	9272-5	2517
20792	7590	10/21/2003		
MYERS BIGEL SIBLEY & SAJOVEC PO BOX 37428 RALEIGH, NC 27627				
			EXAMINER PRICE, CARL D	
			ART UNIT 3749	PAPER NUMBER

DATE MAILED: 10/21/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/027,846

Applicant(s)

BAKSHI ET AL.

Examiner

CARL D. PRICE

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48, 50 and 53-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 27-48 is/are allowed.
- 6) ☒ Claim(s) 1-9, 11, 12, 14, 15, 18-26, 50 and 53-56 is/are rejected.
- 7) ☒ Claim(s) 10, 13, 16 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 1-48, 50 and 53-56 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's arguments, see page 16, lines 22-25, filed 07-31-2003, with respect to the rejection(s) of claim 1 under Greathead have been fully considered and are persuasive. However, upon further consideration, new ground of rejection is made in view of wherein the plurality of apertures (6) are now relied on to meet certain limitations of applicant's claims 1 and 6.

Applicant argues that "Any non-uniformity in the pattern of the aperture 38 of Dawson-Elli is very subtle, at most." And, "In fact, it appears (and would appear to the ordinary observer) that, to the extent there is any non-uniformity, it is the result of inexactness in the drafting of the drawing and/or alteration caused by photocopying or the like." Applicant further contends that "The specification of Dawson-Elli taken as a whole, indicates the pattern of the apertures 38 is in fact uniform." Applicant's argument is however not persuasive. The examiner maintains that non-uniform pattern illustrated in Figure 6 of Dawson-Elli show applicant's claimed structural features and how they are put together whether or not, as speculated by applicant, the feature shown is unintended or unexplained in the specification. Applicant's attention is directed to M.P.E.P 2125 reproduced herein below for a more detailed explanation of the use of drawings as prior art.

M.P.E.P. - 2125 Drawings as Prior Art

DRAWINGS CAN BE USED AS PRIOR ART

Drawings and pictures can anticipate claims if they clearly show the structure which is claimed. In re Mraz, 455 F.2d 1069, 173 USPQ 25 (CCPA 1972). However, the picture must show all the claimed structural features and how they are put together. Jockmus v. Leviton, 28 F.2d 812 (2d Cir. 1928). **The origin of the drawing is immaterial.** For instance, drawings in a design patent can anticipate or make obvious the claimed invention as can drawings in utility patents. **When the reference is a utility patent, it does not matter that the feature shown is unintended or unexplained in the specification. The drawings must be evaluated for what they reasonably disclose and suggest to one of ordinary skill in the art.** In re Aslanian, 590 F.2d 911, 200 USPQ 500 (CCPA 1979). See MPEP § 2121.04 for more information on prior art drawings as “enabled disclosures.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

the invention was first patented or caused to be patented, or was the subject of an inventor's certificate, by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application for patent or inventor's certificate filed more than twelve months before the filing of the application in the United States.

the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who

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has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000.

Claims 1,2 and 6 are rejected under 35 U.S.C. 102(b)

Claims 1,2 and 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Greathead.

Greathead shows a burner module having a plurality of parallel planar layers (1,2) where a distribution layer (1) has a plurality of apertures (6) defining a non-uniform pattern. In regard to claim 2, the size of the Greathead aperture lengths vary. In regard to claim 6, the separate outermost burner face (2) has outlets (29,31,32) formed thereon.

Claims 1,5,6,9-12,14,15 and 26: rejected under 35 U.S.C. 102(b)

Claims 1,5,6,9,11,12,14,15 and 26 are rejected under 35 U.S.C. 102(b) as being anticipated by Dawson-Elli et al (WO 00/36340).

Dawson-Elli et al shows and discloses a burner manifold (118) having first and second inlets (H, J) and a plurality of first and second outlets (not referenced) to which are mounted first and second adapter blocks including slotted lower and upper plenum layers (36a, 36b and 42a, 42b), burner face layers (58a, 58b), distribution layer (14a, 14b) including non-uniform (see the non-uniform spacing illustrated in figure 6).

Claims 50: rejected under 35 U.S.C. 102(b)

Claim 50 is rejected under 35 U.S.C. 102(b) as being anticipated by Crowe.

Crowe shows a burner module having burner face layer coated with a reflective aluminum oxide layer as a shield that retards the flow of heat into the metal face of the torch block and when the face of the shield becomes highly heated it radiates a substantial amount of heat to the work-piece and supplements the heat of the flames.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 3,4,7,8 and 18-25: rejected under 35 U.S.C. 103(a)

Claims 3,4,7,8 and 18-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dawson-Elli et al (WO 00/36340).

Dawson-Elli et al shows and discloses a burner manifold (118) having first and second inlets (H, J) and a plurality of first and second outlets (not referenced) to which are mounted first and second adapter blocks including slotted lower and upper plenum layers (36a, 36b and 42a, 42b), burner face layers (58a, 58b), distribution layer (14a, 14b) including non-uniform (see the non-uniform spacing illustrated in figure 6).

In regard to claims 3,4,7,8 and 18-25, since the diameter and length of the apertures would necessarily depend on numerous design concerns such as the overall size and proportions of the burner apparatus, flame shape and size requirements, the type of fuel used, etc. select the diameter and dimensions of the apertures and passages as set forth in applicant's claims can be viewed as nothing more than a mere matter of choice in design absent the showing of any new or unexpected results there from over the prior art of record.

Claims 53-56: rejected under 35 U.S.C. 103(a)

Claims 53-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greathead in view of Nagaraj et al.

Greathead shows a burner module having a plurality of parallel planar layers (1,2) where the distribution layer has a plurality of apertures of varying sizes (29,31,32) defining a non-uniform pattern. Greathead however does not disclose providing the outer surface of the module with a heat reflective oxide, metal or gold layer.

Nagaraj et al teaches, from the same high temperature nozzle field of endeavor as Greathead, providing gold (see column 1, line 37) and oxide coatings (see column 2, line 26) as reflective coatings for high temperature nozzle components. In regard to claims 53-56, for the

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purpose of prolonging the useful life of the providing burner module of Greathead, it would have been obvious to a person having ordinary skill in the art to apply a reflective surface layer including a metal oxide layer and reflective metal such as gold, in view of the teaching of Nagaraj et al.

Allowable Subject Matter

Claims 27-48 are allowed.

Claims 10,13,16 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

See the attached PTO FORM for prior art made of record that is not relied upon, which is considered pertinent to applicant's disclosure.

USPTO CUSTOMER CONTACT INFORMATION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CARL D. PRICE whose telephone number is 703-308-1953. The examiner can normally be reached on Monday through Friday between 6:30am-3:00pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Bennett can be reached on 703-308-0101. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 308-1148/0858.

A handwritten signature in black ink, appearing to read 'Carl D. Price', with a stylized, flowing script.

CARL D. PRICE
Primary Examiner
Art Unit 3743

cp
October 16, 2003